



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/819,273	03/28/2001	Yasuji Hagiwara	9281-3969	4298

757 7590 11/05/2003

BRINKS HOFER GILSON & LIONE  
P.O. BOX 10395  
CHICAGO, IL 60611

EXAMINER

KOVALICK, VINCENT E

ART UNIT	PAPER NUMBER
----------	--------------

2673

DATE MAILED: 11/05/2003

8

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/819,273

Applicant(s)

HAGIWARA ET AL.

Examiner

Vincent E Kovalick

Art Unit

2673

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 March 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All   b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |                                                                                              |                                                                             |
|----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Response to Amendment*

1. This Office Action is in response to Applicant's Amendment dated March 26, 2003 in response to USPTO Office Action dated December 27, 2002. The amendments to the Specification and claim 1 have been review and entered in the record, and Applicant's Remarks have been considered. Applicant's remarks relative to claims 1-6 are rendered moot in light of Applicant's amendment to claim 1 and the introduction of new prior art used in the rejection of claim 1 on which claims 2-6 are dependent.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 3-4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsuda (USP 6,362,810) in view of Durrani et al. (USP 6,011,542).

Claim 1, is rejected under 35 U.S.C. 103(a) as being unpatentable over Matsuda (USP 6,362,810) taken with Durrani et al. (USP 6,011,542).

Relative to claim 1, Matsuda **teaches** a tiltable joystick pointing device (col. 1, lines 66-67; col. 2, lines 1-67; col. 3, lines 1-57 and Fig. 1); Matsuda further **teaches** a character input apparatus comprising, an operation unit, a support that supports the operation unit so as to be

Art Unit: 2673

inclinable (col. 1, lines 66-67 and col. 2, lines 1-3) a first detection unit (controller) that generates a different signal corresponding to an inclination direction of the operation unit, a second detection unit that generates a signal based on a motion when the operation unit is moved in a direction different from the inclination direction (col. 2, lines 28-41; col. 4, lines 30-42 and Fig. 1).

Matsuda **does not teach** a control unit that selects character data from among N data groups based on detected output from the first detection unit when the operation unit is inclined and that finalizes data selected based on detected output from the second detection unit when the operation unit is operated in the direction different from the inclination direction.

Matsuda teaches a tiltable joystick pointing device that is capable of producing more diverse detector signal contents than was hitherto possible by adding a pull-up and push-down action to the tiltable joystick pointing device.

Durrani et al. **teaches** a graphical text entry wheel for allowing entry of data on a portable hand held consumer device (col. 2, lines 8-52); Durrani et al. further **teaches** a control unit that selects character data from among N data groups based on detected output from the first detection unit when the operation unit is inclined and that finalizes data selected based on detected output from the second detection unit when the operation unit is operated in the direction different from the inclination direction (col. 3, lines 53-54; col. 4, lines 1-4 and 9-15; col. 6, lines 1-10; col. 7, lines 48-54; col. 9, lines 10-24; col. 10, lines 28-34 and col. 12, lines 32-34 and 45-46).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to provide to the device as taught by Matsuda the feature as taught by Durrani et al. in order to

Art Unit: 2673

provide an improved text entry system for entering text on a graphical interface of a small consumer product in which the material can be entered using only one hand of the user (Durrani et al. col. 1, lines 58-61).

Regarding claim 3, Matsuda **teaches** the character input apparatus wherein the control unit selects the data successively based on the output change of the first detection unit when the inclination direction of the operation unit is changed while the inclination of the operation unit that is inclined in a desired direction is being maintained (col. 2, lines 28-34).

Relative to claim 4, Durrani et al. **teaches** the character input apparatus wherein the N data groups include 26 alphabetical characters (col. 3, lines 13-17 and Fig. 1).

Regarding claim 6, Durrani et al. **teaches** said character input apparatus wherein when the control unit selects the data and the selected data is displayed on a display unit, the control unit generates the display data so that not only the data selected based on the inclination direction of the operation unit but also one data positioned adjacent to the selected data is displayed simultaneously on the display unit (col. 3, lines 13-33).

4. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matsuda taken with Durrani et al. as applied to claim 1 in item 3 hereinabove, and further in view of Kandogan et al. (USP 6,184,867).

Regarding claim 2, Matsuda taken with Durrani et al. **does not teach** the character input apparatus wherein the support is provided with two rotational shafts that are rotated when the operation unit is inclined and two rotation detection means for detecting a rotation magnitude of each rotation shaft, the two rotation detection means constitute the first detection unit, and the detected output is obtained from the second detection unit when the operation unit is moved in a

Art Unit: 2673

direction perpendicular to the rotational shafts.

Matsuda taken with Durrani et al. teaches a tiltable joystick pointing device that is capable of producing more diverse detector signal contents than was hitherto possible by adding a pull-up and push-down action to the tiltable joystick pointing device; applying this feature to improving text entry on a graphical screen on a small consumer product.

Kandogan et al. **teaches** input for three dimensional navigation using two joysticks (col. 3, lines 47-67 and col. 4, lines 1-38). Kandogan et al. further **teaches** a character input apparatus wherein the support is provided with two rotational shafts that are rotated when the operation unit is inclined and two rotation detection means (conversion means) for detecting a rotation magnitude of each rotation shaft, the two rotation detection (conversion means) means constitute the first detection unit (col. 5, lines 27-45 and 52-55 and col. 8, lines 6-12); and the detected output is obtained from the second detection unit when the operation unit is moved in a direction perpendicular to the rotational shafts.

Claim 2 is further rejected based on Duplicate Parts for a Multiplied Effect. St. Regis Paper Co. v. Bemis Co. Inc., -- 193 USPQ 8, 11 (7<sup>th</sup> Cir. 1977). The function and makeup of the second rotating shaft unit is the same as that of the first rotating shaft.

It would have been obvious to a person of ordinary skill in the art at the time of the invention to provide to the device as taught by Matsuda taken with Durrani et al. the feature as taught by Kandogan et al. in order to expand the functionality of the system input unit to provide additional means for manipulating displayed dated.

5. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matsuda taken with Durrani et al. as applied to claim 4 in item 3 hereinabove, and further in view of Saito et al.

(USP 4,777,600).

Regarding claim 5, Matsuda taken with Durrani et al. **does not teach** said character input apparatus wherein a conversion means for converting input data of alphabetical characters to kana characters.

Matsuda taken with Durrani et al. teaches a tiltable joystick pointing device that is capable of producing more diverse detector signal contents than was hitherto possible by adding a pull-up and push-down action to the tiltable joystick pointing device; applying this feature to improving text entry on a graphical screen on a small consumer product.

Saito et al. **teaches** a phonetic data-to-kanji converter (col. 2, lines 53-67 and col. 3, lines 1-43); Saito et al. further **teaches** a conversion means for converting input data of alphabetical characters to kana characters (col. 3, lines 61-67; col. 4, line 1 and Fig. 2).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to provide to the device as taught by Matsuda taken with Durrani et al. the feature as taught by Saito et al. of incorporating conversion means for converting input of alphabetical character to kana characters in order to automate the process of converting text of the English language to a form of Japanese. Saito et al. teaches the input device being a keyboard (col. 3, line 61) adapting the conversion process to the "joystick" means as taught by Masuda taken with Durrani et al. would add the improvement of being able to input data with one hand instead of using a keyboard.

6. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matsuda taken with Durrani et al. as applied to claim 4 in item 3 hereinabove, and further in view of Okumura (USP 5,966,719).

Art Unit: 2673

Relative to claim 7, Matsuda taken Durrani et al. **does not teach** said character input apparatus wherein a second conversion means for converting the kana characters to kanji characters is provided.

Matsuda taken with Durrani et al. teaches a tiltable joystick pointing device that is capable of producing more diverse detector signal contents than was hitherto possible by adding a pull-up and push-down action to the tiltable joystick pointing device; applying this feature to improving text entry on a graphical screen on a small consumer product.

Okumura **teaches** a method related to the conversion of kana syllabic characters to kanji characters (col. 2, lines 48-67; col. 3, lines 1-67 and col. 4, lines 1-29); Okumura further **teaches** a second conversion means for converting the kana characters to kanji characters (col. 6, lines 54-67).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to provide to the device as taught by Matsuda taken Durrani et al. the feature as taught by Okumura in order to automate the cumbersome task of convert Kana characters to kanji characters.

Okumura teaches the need for an input device for entering document having non-Latin characters (col. 1, lines 6-10); adapting the conversion means as taught by Okumura to use the "joystick" means as taught by Masuda taken with Durrani et al. would add the improvement of being able to input data with one hand instead of using a keyboard.

#### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. .



Art Unit: 2673

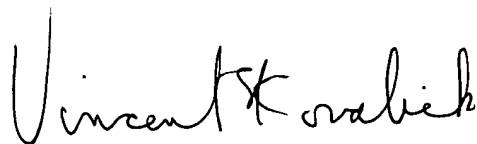
U. S. Patent No.	6,381,027	Tanaka
U. S. Patent No.	6,323,840	Steinbrunner
U. S. Patent No.	6,331,849	VandenBoom
U. S. Patent No.	6,300,937	Rosenberg
U. S. Patent No.	6,285,356	Armstrong
U. S. Patent No.	6,175,358	Scott-Jackson et al.
U. S. Patent No.	6,002,388	Seffernick et al.
U. S. Patent No.	5,831,596	Marshall et al.
U. S. Patent No.	5,468,924	Naitou et al.

***Responses***

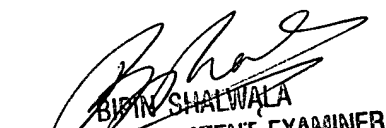
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vincent E Kovalick whose telephone number is 703 306-3020. The examiner can normally be reached on Monday-Thursday 7:30- 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on 703 305-4938. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 306-0377.



Vincent E. Kovalick



BIPIN SHALWALA  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600